U.S. ARCHITECTURAL LIGHTING

PROJECT NAME:

PROJECT TYPE:

HINGED BASE ROUND TAPERED ALUMINUM POLE

HBRTA

Shaft
Spun tapered from 6063 alloy aluminum tubing. Heat treated to produce a T6 temper. Shaft is furnished with ground lugs located on cast aluminum base plate.

Drilling Side Mount
A removable pole cap is included. Pole will be drilled to match U.S. Architectural fixtures. For other Drilling required, please specify DP after specified drill pattern. (example: 2-180DP)

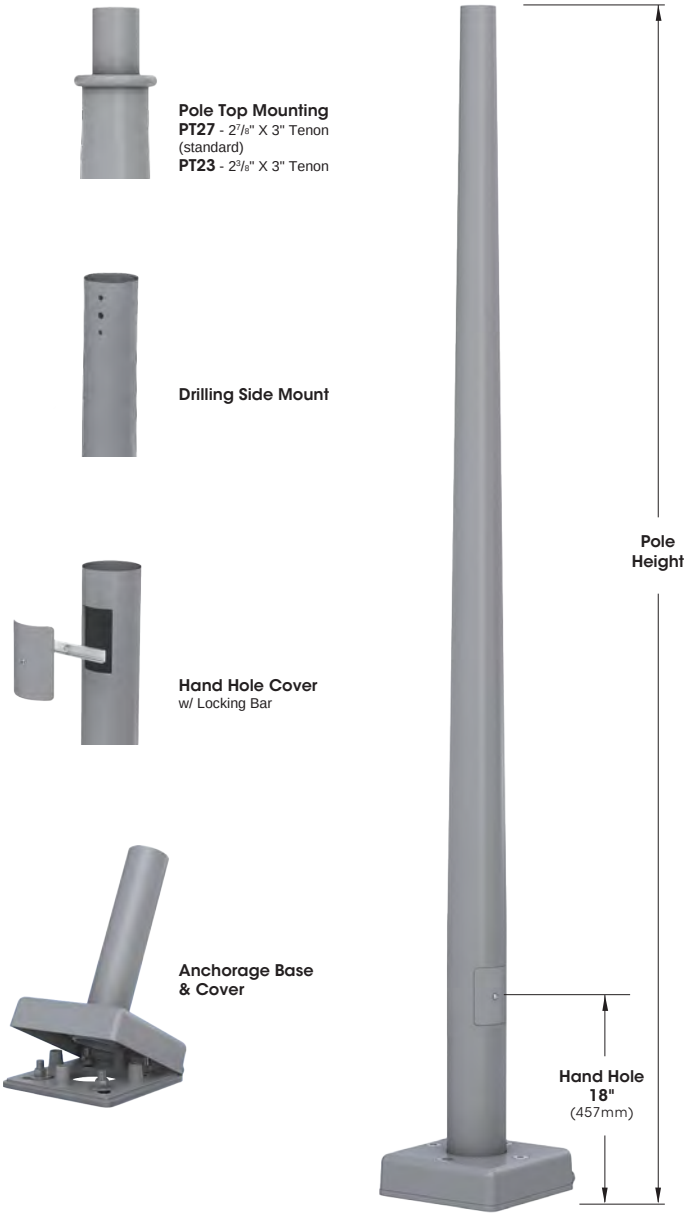
Pole Top Mount
Standard pole top mount - PT27, fabricated from 2.5" (2.875" O.D.) aluminum pipe – tenon options available for pole tops please see Mounting column. For other pole top configurations please consult factory.

Hand Hole Cover
Rectangular 3" x 5" stamped heavy gauge aluminum material Hand Hole Cover, 2¼" x 4¼" access opening. Sealed door is secured by a formed aluminum bar and a stainless steel, tamper proof screw.

Anchor Base & Cover
Uniquely designed, patented Hinge Base Pole Assembly was created to simplify the installation process. Hinged Anchor Base Assembly, with four heavy wall bosses to accept four stainless steel Countersink Bolts, for a strong and secure fit, is cast from 356 alloy aluminum. The complete Assembly is heated-treated to a T6 temper. (4) 3/4"-10 Bolts secure Base to Anchor Plate. Base Hinges utilize a 11/16" steel Pin, to insure easy and secure hinging mechanism for safe installation and maintenance. Steel Pin is easily removed by internal stainless Set Screw. Hinge Base is self-containing with the Base Top serving as an aesthetically pleasing decorative Cover.

Anchorage
(4) anchor bolts fabricated from hot rolled steel bar. Minimum yield strength of 50,000 P.S.I. Bolts have "L" bend on one end and are threaded on the other. Bolts are fully galvanized and are furnished with two nuts and two washers.

Finish
Electrostatically applied TGIC Polyester Powder Coat on substrate prepared with 20 PSI power wash at 140°F. Four step media blast and iron phosphate pretreatment for protection and paint adhesion. 400°F bake for maximum hardness and durability.



Pole Model	Pole Dia.		Pole Height
	Bottom	Top	
HBRTA	4"	3"	10' - 16'
HBRTA	5"	3"	12' - 18'

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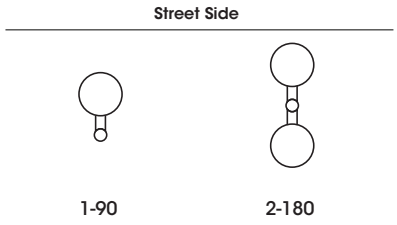
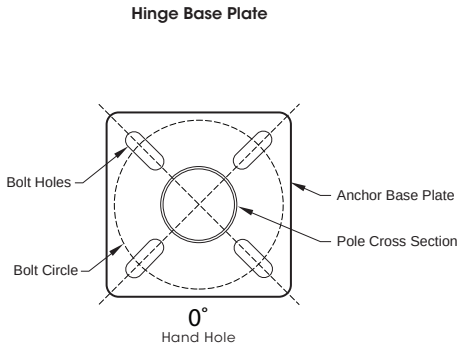
DRILLING SIDE MOUNT

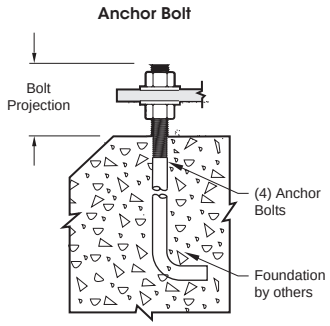


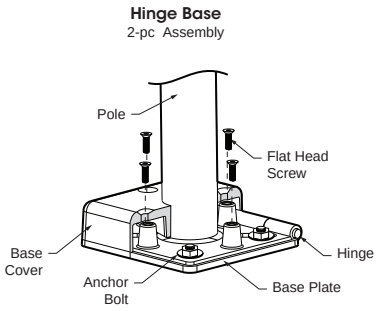
Notes
When drilling pattern from other manufacturer's fixture is required, add "DP" to drill specifications.
(Example: 2-180DP) **Drilling template must be provided.**

In the case of other manufacturer's drilling pattern, customer must provide drilling pattern.

BOLT CIRCLE







Catalog Number	HINGE BASE POLE								ANCHOR BOLTS				HINGE BASE ASSEMBLY		
	Height		Bottom - Top				Wall Thickness (In/Ga)	Weight (Lbs)	Bolt Size	Bolt Projection above grade[2,3]	Bolt Circle Dia Range[1]	Bolt Circle Dia (In) (Rec:)[1]	Template	Hinge Anchor Plate	Hinge Base Asembly
	Ft	M	In		Cm										
HBRTA 1043-188	10	3.05	4.00	3.00	10.16	7.62	0.188	43	¾" x 18" x 3"	3¼" - 3¾"	8" - 12"	10"	US10	¾" x 12"x 12"	3½" x 12" x 12"
HBRTA 1243-188	12	3.66	4.00	3.00	10.16	7.62	0.188	48	¾" x 18" x 3"	3¼" - 3¾"	8" - 12"	10"	US10	¾" x 12" x 12"	3½" x 12" x 12"
HBRTA 1443-125	14	4.27	4.00	3.00	10.16	7.62	0.125	42	¾" x 18" x 3"	3¼" - 3¾"	8" - 12"	10"	US10	¾" x 12" x 12"	3½" x 12" x 12"
HBRTA 1443-188	14	4.27	4.00	3.00	10.16	7.62	0.188	52	¾" x 18" x 3"	3¼" - 3¾"	8" - 12"	10"	US10	¾" x 12" x 12"	3½" x 12" x 12"
HBRTA 1643-125	16	4.88	4.00	3.00	10.16	7.62	0.125	45	¾" x 18" x 3"	3¼" - 3¾"	8" - 12"	10"	US10	¾" x 12" x 12"	3½" x 12" x 12"
HBRTA 1253-188	12	3.66	5.00	3.00	12.70	7.62	0.188	52	¾" x 18" x 3"	3¼" - 3¾"	8" - 12"	10"	US10	¾" x 12" x 12"	3½" x 12" x 12"
HBRTA 1453-188	14	4.27	5.00	3.00	12.70	7.62	0.188	57	¾" x 18" x 3"	3¼" - 3¾"	8" - 12"	10"	US10	¾" x 12" x 12"	3½" x 12" x 12"
HBRTA 1553-188	15	4.57	5.00	3.00	12.70	7.62	0.188	60	¾" x 18" x 3"	3¼" - 3¾"	8" - 12"	10"	US10	¾" x 12" x 12"	3½" x 12" x 12"
HBRTA 1653-188	16	4.88	5.00	3.00	12.70	7.62	0.188	62	¾" x 18" x 3"	3¼" - 3¾"	8" - 12"	10"	US10	¾" x 12"x 12"	3½" x 12" x 12"
HBRTA 1853-188	18	5.49	5.00	3.00	12.70	7.62	0.188	67	¾" x 18" x 3"	3¼" - 3¾"	8" - 12"	12"	US12	¾" x 12" x 12"	3½" x 12" x 12"

1 - Not using correct bolt size or "(REC.) Recommended" Bolt Circle could result in Pole's failure.
2 - Bolt Projection is calculated for slopes with 3 degrees or less.
3 - For slopes greater than 3 degrees, please add Bolt Length Projection as necessary.
4 - The maximum weight allowed on any assembly, including fixtures and options, is 100 lbs.

ORDERING INFORMATION

Spec/Order Example: HBRTA2064-188/1-90/RAL-6005-T

Pole Model Number | Mounting | Finish | Options

Pole Model Number

	Pole Height	Pole Bottom	Pole Top	Wall Thickness
☐ **HBRTA 1043-188**	10'	4.00"	3.00"	0.188
☐ **HBRTA 1243-188**	12'	4.00"	3.00"	0.188
☐ **HBRTA 1443-125**	14'	4.00"	3.00"	0.125
☐ **HBRTA 1443-188**	14'	4.00"	3.00"	0.188
☐ **HBRTA 1643-125**	16'	4.00"	3.00"	0.125
☐ **HBRTA 1253-188**	12'	5.00"	3.00"	0.188
☐ **HBRTA 1453-188**	14'	5.00"	3.00"	0.188
☐ **HBRTA 1553-188**	15'	5.00"	3.00"	0.188
☐ **HBRTA 1653-188**	16'	5.00"	3.00"	0.188
☐ **HBRTA 1853-188**	18'	5.00"	3.00"	0.188

Other heights available
Please consult factory
Poles 4" Dia. bottom not to exceed 16 feet
Poles 5" Dia. bottoms not to exceed 18 feet

Mounting

Tenon Mount

☐ $2^{7}/_{8}$" X 3" Tenon
PT27
(Standard)

☐ $2^{3}/_{8}$" X 3" Tenon
PT23

☐ $2^{7}/_{8}$" X 6" Tenon
PT276

☐ Other Tenon Mt ____

Drill Mount

☐ **1-90** .....

☐ **2-180** .....

When Drilling Pattern from other manufacturer is required, add "DP" to drill specifications
(Example: **2-180DP**)
Drilling template must be provided.

Finish

Standard Smooth Finish

☐ Black
RAL-9005-S

☐ White
RAL-9003-S

☐ Grey
RAL-7004-S

☐ Dark Bronze
RAL-8019-S

☐ Green
RAL-6005-S

Premium Finishes

☐ Rust

☐ Patina Copper
PC

☐ Custom
Specify RAL# ____

☐ Anodized
AZ

For Smooth Finish replace suffix "T" with suffix "T"
Example: RAL-9005-S

See USALTG.COM for additional colors

Options

☐ Vibration Dampener
2nd Mode Field Install
VBDS-M2

Receptacle

☐ G.F.I. Receptacle w/ Cover
GFI

☐ G.F.I. Receptacle w/ In-Use Cover
GFI-IU

[**Specify GFI location**: Height and Direction]
See Location Diagram below

Coupling

☐ ½" Coupling **CPLN12**
☐ ¾" Coupling **CPLN34**
☐ 1¼" Coupling **CPLN114**
☐ 1½" Coupling **CPLN112**
☐ 2" Coupling **CPLN2**

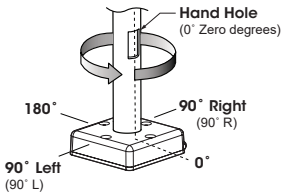
[**Specify Coupling location**: Height and Direction]
See Location Diagram below

Nipple

☐ ½" Nipple **NPLE12**
☐ ¾" Nipple **NPLE34**
☐ 1¼" Nipple **NPLE114**
☐ 1½" Nipple **NPLE112**
☐ 2" Nipple **NPLE2**

[**Specify Coupling location**: Height and Direction]
See Location Diagram below

Location Diagram
Please use this diagram to indicate placement location



Refer to the Accessories Section for other options

OPTIONS

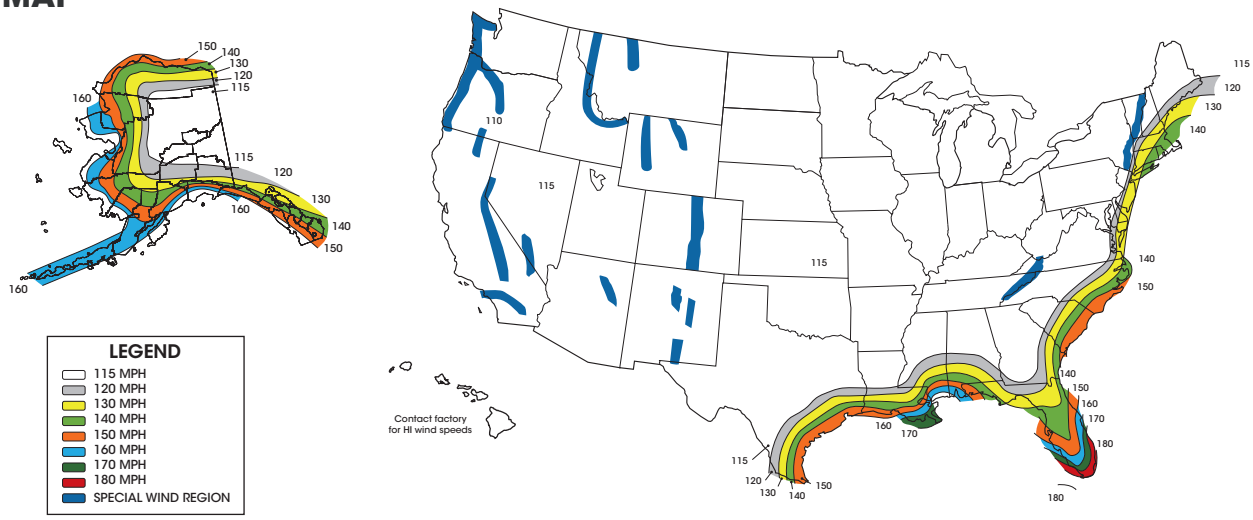
GFI
Duplex GFI
w/ Cover

GFI-IU
Duplex GFI
w/ In-Use Cover

CPLN
½", ¾", 1¼', 1½",
or 2" Coupling

NPLE
½", ¾", 1¼', 1½",
or 2" Nipple

WIND MAP



EPA INFORMATION (ft^2) (per AASHTO LRFDLTS-1 revised 2022)

Cat. No.	Weight Capacity Maximum (Lbs.)	100 MPH	110 MPH	115 MPH	120 MPH	130 MPH	140 MPH	150 MPH	160 MPH	170 MPH	180 MPH
HBRTA 1043-188	100 - 73.5*	9.8	7.8	7.0	6.1	5.0	4.0	3.3	2.8	2.6	2.1
HBRTA 1243-188	100 - 60*	7.4	5.6	5.0	4.5	3.4	2.6	2.2	1.7	1.6	1.3
HBRTA 1443-125	100 - 60*	3.0	2.1	1.7	1.3	0.8	0.4	0.0	0.0	0.0	0.0
HBRTA 1443-188	100 - 60*	5.5	4.2	3.5	3.0	2.2	1.5	1.2	1.0	0.8	0.6
HBRTA 1643-125	100 - 60*	1.9	1.1	0.8	0.5	0.0	0.0	0.0	0.0	0.0	0.0
HBRTA 1253-188	100 - 100*	12.9	10.4	9.3	8.4	6.9	6.0	5.0	4.3	3.9	3.3
HBRTA 1453-188	100 - 87.5*	10.2	8.1	7.0	6.3	5.2	4.5	3.7	3.3	2.7	2.5
HBRTA 1553-188	100 - 73.5*	9.1	7.0	6.1	5.6	4.5	3.9	3.3	2.8	2.4	2.1
HBRTA 1653-188	100 - 60*	7.6	5.9	5.0	4.6	3.6	3.0	2.5	2.1	1.9	1.5
HBRTA 1853-188	100 - 60*	6.1	4.4	3.9	3.4	2.8	2.1	1.7	1.5	12	1.1

EPA INFORMATION (ft^2) (per 2020 FL Building Code)

Cat. No.	Weight Capacity Maximum (Lbs.)	120 MPH	130 MPH	140 MPH	150 MPH	160 MPH	170 MPH	180 MPH
HBRTA 1043-188	100 - 66.5*	5.4	4.5	3.8	3.1	2.6	2.4	1.9
HBRTA 1243-188	100 - 60*	3.6	2.9	2.4	2.0	1.5	1.4	1.0
HBRTA 1443-125	100 - 60*	2.0	1.6	1.3	1.0	0.8	0.6	0.5
HBRTA 1443-188	100 - 60*	1.0	0.7	0.4	0.0	0.0	0.0	0.0
HBRTA 1643-125	100 - 100*	7.7	6.6	5.6	4.7	4.1	3.7	3.1
HBRTA 1253-188	100 - 66.5*	5.7	4.9	4.2	3.5	3.1	2.5	1.9
HBRTA 1453-188	100 - 60*	5.1	4.3	3.6	3.0	2.6	2.0	1.7
HBRTA 1553-188	100 - 60*	4.0	3.3	2.7	2.2	1.9	1.7	1.3
HBRTA 1653-188	100 - 60*	3.0	2.3	1.6	1.3	1.1	0.9	0.7
HBRTA 1853-188	100 - 60*	3.0	2.3	1.6	1.3	1.1	09	0.7

*** Please use the following to obtain the proper weight capacity: The maximum fixture weight equals 60 lbs. or the product of 35 lbs. x the EPA value, whichever is greater, not to exceed 100 lbs. Example, EPA = 2.2 , weight = 35 lbs. x 2.2 EPA = 77 lbs.**

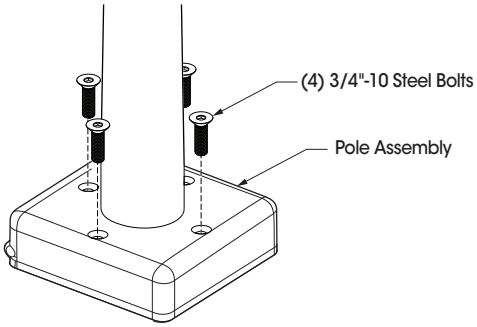
Notes

- Specifier is responsible for correct pole selection. For proper pole choice, the specifier must consider the total EPA of fixtures, banners, arms, and any other accessories attached to pole assembly.
- U.S. Architectural discourages the attachment of unauthorized accessories; any such attachments will void the manufacturer's warranty.
- ALL EPAs are calculated for ground installations. For installations on bridges, buildings or other structures, the specifier must contact the factory or consult with a structural Engineer
- Unpredictable aerodynamic forces such as wind-induced vibrations are not included in wind velocity ratings or EPA ratings.
- Wind gust factors are considered in developing all EPA chart data.

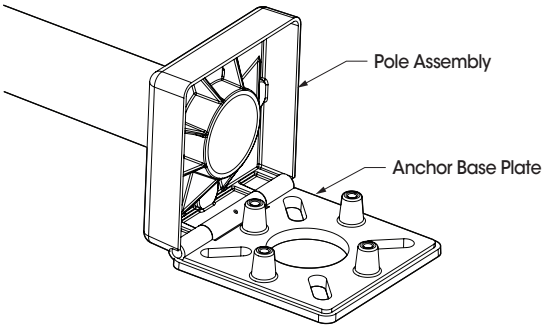
To mitigate 2nd Mode (Aeolian) Vibration please read the following Recommendations:

- We do not recommend the installation of poles without a fixture; such installations have been known to fail due to destructive 2nd mode pole vibration.
- Pole installations with a combined (fixtures, banners, flags, etc.) of less than 0.75 ft2 EPA and 20 feet or taller will be provided with a vibration dampener.

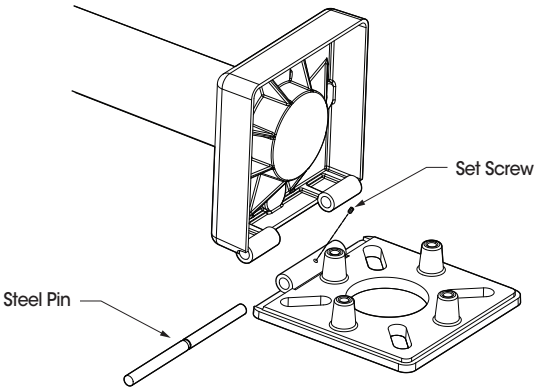
INSTALLATION



1 Remove four 3/4"-10 Steel Bolts from Pole Assembly.

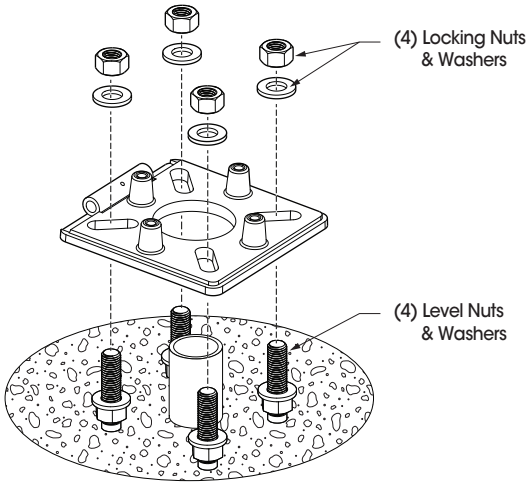


2 Unhinge Pole Assembly from Anchor Base Plate.

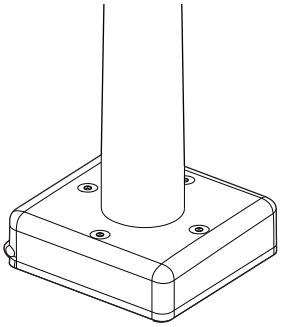


3 **Optional For Easier Installation**

Loosen Set Screw and slide Steel Pin out, save for later use.
(**NOTE:** Anchor Base Plate/Pole Assembly can also be installed w/out the removal of Steel Pin.)

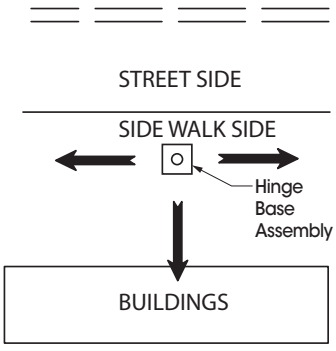


4 Install Anchor Base Plate following installation instructions (available upon request).



5 Attach Pole Assembly back on to Anchor Base Plate. If Steel Pin was removed, restore to original position and lock into place with Set Screw provided.

Secure Pole Assembly to Anchor Base Plate by reinstalling four 3/4"-10 Steel Bolts.

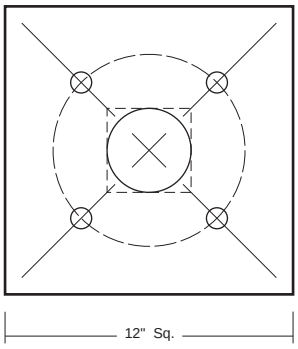


CAUTION
Ensure sufficient space during Hinge Base Assembly installation to avoid Pole from hinging into the street or nearby buildings.

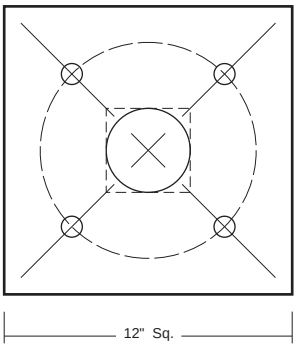
ANCHOR BOLT TEMPLATES

For printable versions of Templates: click on the Template's name, otherwise go to https://usaltg.com/downloads/templates.html.

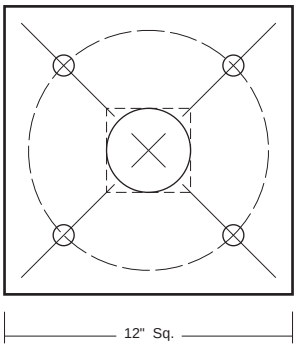
US8
8" Bolt Circle



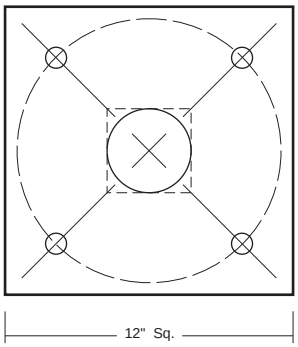
US9
9" Bolt Circle



US10
10" Bolt Circle



US11
11" Bolt Circle



US12
12" Bolt Circle